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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,890	05/26/2000	RYOUMEI OMOTE	00177/530850	2420

7590 04/15/2003

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EXAMINER
PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
1775	16

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/486,890	OMOTE ET AL.	
	Examiner	Art Unit	
	Andrew T Piziali	1775	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-55* is/are pending in the application.

4a) Of the above claim(s) *See Continuation Sheet* is/are withdrawn from consideration.

5)☒ Claim(s) *46,48 and 50* is/are allowed.

6)☒ Claim(s) *16,19,21,23,26,28,30,32,33,36,38,40,42,44,45,52 and 54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *04 March 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Continuation of Disposition of Claims: Claims withdrawn from consideration are 17,18,20,22,24,25,27,29,31,34,35,37,39,41,43,47,49,51,53 and 55.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I in Paper No. 10 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. The proposed drawing corrections and/or the proposed substitute sheets of drawings, filed on 3/4/2003 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Objections

3. Claims 33, 36, 38, 40, 42, 44 and 45 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. Claim 16 establishes that the transparent conductive film is provided on an electrode substrate of at least one electrode out of the lower electrode and the upper electrode and thereby forming the electrode.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,351,068 to Yamazaki et al. (hereinafter referred to as Yamazaki) in view of Applicants Disclosure.

Regarding claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54, Yamazaki discloses that it is known in the art of touch panels (column 1, lines 16-26) to form an ITO transparent conductive electrode film by sputtering at a film formation temperature of 100 to 150C followed by aging performed at a temperature of around 150C (see entire disclosure including Description of Prior Art).

Considering that the ITO transparent conductive electrode films taught by Yamazaki are formed by substantially identical methods compared to the method utilized by the current applicant (see Examples 1-4 on pages 38-46 of the current specification), it appears that the ITO electrodes of Yamazaki possess the claimed surface roughness properties.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Yamazaki does not mention the a specific touch panel structure, but the current applicant discloses that a typical resistor-film analog type transparent touch panel has a lower electrode

and an upper electrode stacked so as to be spaced from each other by spacers, the transparent conductive film being provided on an electrode substrate of at least one of the electrodes forming the electrode and thereby forming the electrode (see page 2, lines 11-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the touch panel structure disclosed by the current applicant, as the touch panel structure of Yamazaki, because the touch panel structure disclosed by the current applicants is a typical resistor-film analog type transparent touch panel structure.

Regarding claims 28, 30 and 32, considering the substantially identical ITO films of Yamazaki, compared to the ITO film claimed by the current applicant, it is the examiner's position that the films of Yamazaki are identical to or only slightly different than the claimed film prepared by the method of the claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show obvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983). Yamazaki either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the Yamazaki.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Applicants Disclosure as applied to claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 above, and further in view of USPN 5,411,792 to Yukinobu et al. (hereinafter referred to as Yukinobu).

Yamazaki discloses the use of an ITO transparent conductive film, but does not mention the use of a fluorine or antimony doped tin oxide film. Yukinobu discloses that both ITO and antimony doped tin oxide layers (ATO) are used to form transparent electrodes for liquid crystal display panels (column 1, lines 6-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the transparent electrode of Yamazaki from either ITO or ATO, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

7. Claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,225,273 to Mikoshiba et al. (hereinafter referred to as Mikoshiba) in view of Applicants Disclosure.

Regarding claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54, Mikoshiba discloses that it is known in the art of touch panels (column 1, lines 14-23) to form an ITO transparent conductive electrode film by sputtering at a film formation temperature of 100 to 150C followed by aging performed at a temperature of around 150C (column 9, line 32 through column 10, lines 64).

Considering that the ITO transparent conductive electrode film taught by Mikoshiba is formed by a substantially identical method compared to the method utilized by the current

applicant (see Examples 1-4 on pages 38-46 of the current specification), it appears that the ITO electrode of Mikoshiba possesses the claimed surface roughness properties.

Mikoshiba does not mention the a specific touch panel structure, but the current applicant discloses that a typical resistor-film analog type transparent touch panel has a lower electrode and an upper electrode stacked so as to be spaced from each other by spacers, the transparent conductive film being provided on an electrode substrate of at least one of the electrodes forming the electrode and thereby forming the electrode (see page 2, lines 11-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the touch panel structure disclosed by the current applicant, as the touch panel structure of Mikoshiba, because the touch panel structure disclosed by the current applicants is a typical resistor-film analog type transparent touch panel structure.

Regarding claims 28, 30 and 32, considering the substantially identical ITO film of Mikoshiba, compared to the ITO film claimed by the current applicant, it is the examiner's position that the film of Mikoshiba is identical to or only slightly different than the claimed film prepared by the method of the claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show obvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983). Mikoshiba either anticipated or strongly suggested the claimed subject matter.

It is noted that if the applicant intends to rely on Examples in the specification or in a submitted declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the Mikoshiba.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikoshiba in view of Applicants Disclosure as applied to claims 16, 19, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 above, and further in view of USPN 5,411,792 to Yukinobu.

Mikoshiba discloses the use of an ITO transparent conductive film, but does not mention the use of a fluorine or antimony doped tin oxide film. Yukinobu discloses that both ITO and antimony doped tin oxide layers (ATO) are used to form transparent electrodes for liquid crystal display panels (column 1, lines 6-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the transparent electrode of Mikoshiba from either ITO or ATO, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

Allowable Subject Matter

9. Claims 46, 48 and 50 are allowed.

10. The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to teach or suggest a method of fabricating a transparent conductive film for use in a transparent touch panel comprising coating or printing with a sol-gel material, performing a drying process, then an oxidation burning process at a temperature increasing rate of 40-60C per minute within a temperature range of 200-400C, followed by a reduction burning process.

Response to Arguments

11. Applicant's arguments with respect to claims 16, 19, 21, 23, 26, 28, 30, 32-33, 36, 38, 40, 42, 44-45, 52 and 54 have been considered but are moot in view of the new grounds of rejection.

Conclusion

12. The following patents are cited to further show the state of the art with respect to

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (703) 306-0145. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5665.

Andrew T Piziali
Examiner
Art Unit 1775

atp
April 8, 2003

DEBORAH JONES
SUPERVISORY PATENT EXAMINER